

Please add the following new claims:

-- 41. A method of killing a tumor cell *in vivo*, comprising introducing into said cell a replication-conditional adenovirus vector comprising a tumor-specific transcriptional regulatory sequence operably linked to the coding region of a gene that is essential for replication of said vector.

42. A method of killing a tumor cell *ex vivo*, comprising obtaining a tumor cell, placing said cell into *in vitro* culture, and introducing into said cell a replication-conditional adenovirus vector comprising a tumor-specific transcriptional regulatory sequence operably linked to the coding region of a gene that is essential for replication of said vector.

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43. The isolated cell of claim 19, wherein said cell is a producer cell line.

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44. The isolated cell of claim 20, wherein said cell is a producer cell line. --

Please amend the remaining claims as follows:

1. (Once amended) A tissue-specific replication-conditional adenovirus vector [capable of tissue-specific replication] comprising:
a heterologous tissue-specific transcriptional regulatory sequence operably linked to the coding region of a gene that is essential for replication of said vector.

a4 7. (Once amended) The vector of claim [6] 1, wherein said coding region is selected from the group consisting of E1a, E1b, and E2 and E4 coding regions.

9. (Once amended) A method for distributing a polynucleotide in a tissue *in vivo*, comprising introducing a replication-conditional adenovirus vector containing said polynucleotide into said tissue, wherein said vector contains a ~~gene~~ essential for vector replication, the coding region of which gene is operably linked to a heterologous transcriptional regulatory sequence that functions specifically in said tissue so that replication of the vector occurs in said tissue and not in a tissue in which said transcriptional regulatory sequence does not function.

10. (Once amended) The [vector] method of claim 9, wherein the transcriptional regulatory sequence is selected from the group consisting of promoters and enhancers.

11. (Once amended) The [vector] method of claim 10, wherein said promoter is selected from the group consisting of α -fetoprotein, DF3, tyrosinase, CEA, surfactant, and ErbB2.

a6 16. (Once amended) The method of claim [15] 2, wherein said coding region that is operably linked to said transcriptional regulatory sequence is selected from the group consisting of E1a, E1b, E2, and E4 coding regions.

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59b B27 19. (Once amended) [A] An isolated cell containing a tissue-specific replication-conditional adenovirus vector [capable of tissue-specific replication], said vector comprising

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a heterologous tissue-specific transcriptional regulatory sequence operably linked to the coding region of a gene that is essential for replication of said vector, wherein said transcriptional regulatory sequence functions in said cell so that replication of the vector occurs in said cell.

✓ ✓ ✓
In claims 20, 21 and 22, line 1, after "The" and before "cell" please insert -- isolated --.

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26. (Once amended) The isolated cell of claim [25] 19, wherein said coding region that is operably linked to said transcriptional regulatory sequence is selected from the group consisting of E1a, E1b, E2, and E4 coding regions.

✓ ✓
In claims 27 and 28, line 1, after "The" and before "cell" please insert -- isolated --.

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(Once amended) A method of producing a tissue-specific replication-conditional adenovirus vector [capable of tissue-specific replication], said vector comprising a heterologous tissue-specific transcriptional regulatory sequence operably linked to the coding region of a gene that is essential for replication of said vector, comprising culturing the isolated cell of claim 19⁵ and recovering said vector from said cell.

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30. (Once amended) [A] An isolated cell containing a tissue-specific replication-conditional adenovirus virion [capable of tissue-specific replication], said virion comprising a heterologous tissue-specific transcriptional regulatory sequence operably linked to the coding region of a gene that is essential for replication of said virion, wherein said transcriptional regulatory sequence functions in said cell so that replication of the virion occurs in said cell.